

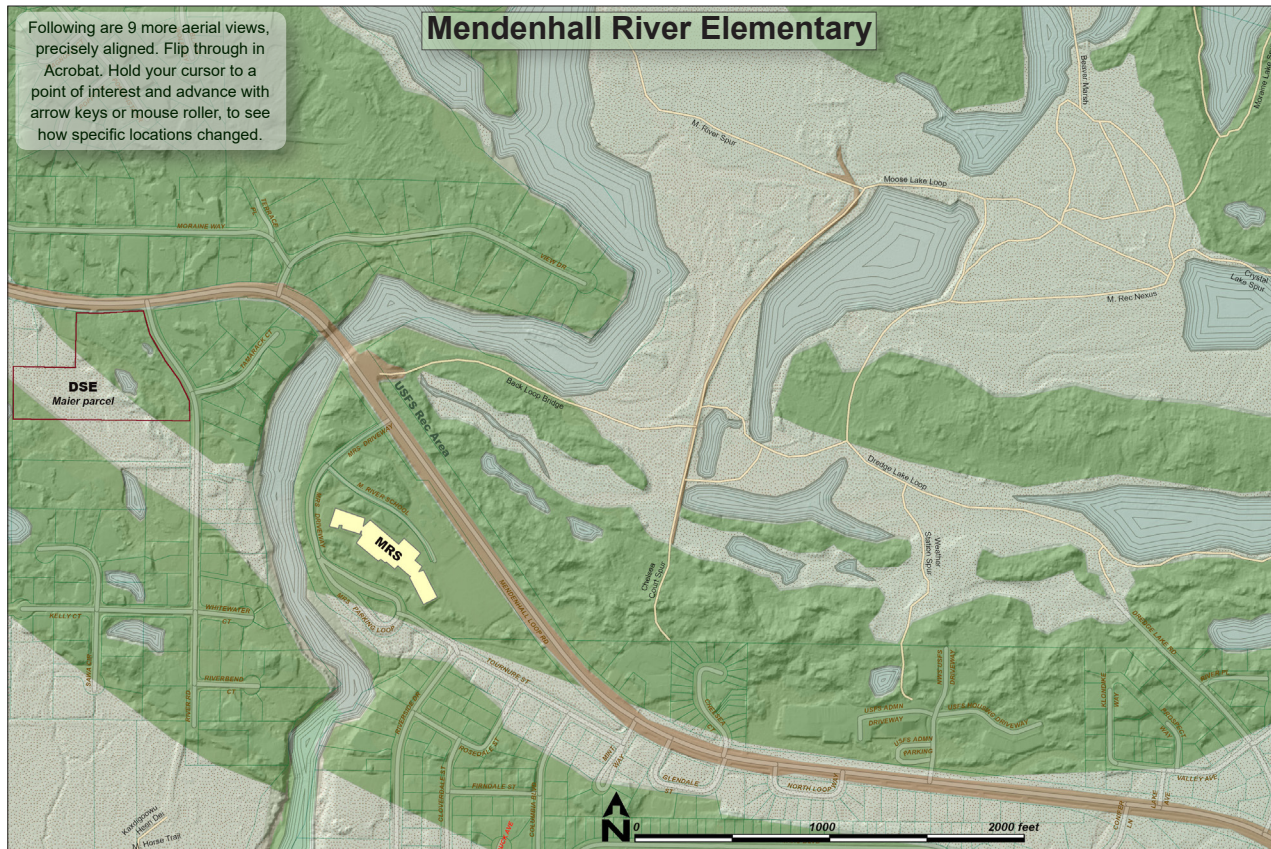
Historical series

Preface 2021: In the early 1990s, Discovery school-site slideshows were *actually made from slides!* I converted 9x9-inch aerial prints to 35mm kodachromes, scaled & rotated for teachers to project in classrooms. (*Alignment was lackadaisical* :). Today, with Arcmap & Photoshop, overlays & precision-rectifies are easier—not to mention sharing digitally & online. *And*, we have more imagery, from subsequent flights and prior historic missions.

Clicking [2020](#) jumps to end. Acrobat-header's ← tool returns. Tips on navigating pdfs are at [JuneauNature>Tools](#)

Bare earth

Hillshade from 2013 LiDAR gives topography, landmarks & placenames for the following series. Surface colors are deposits of [stream](#) & [glacier](#). Terrain quickly accessible on foot from the school includes a vast Recreation Area across Back Loop Road, and Discovery's Maier land, to the west across Wushi l'ux'u Héen, *milky stream* (Mword River)



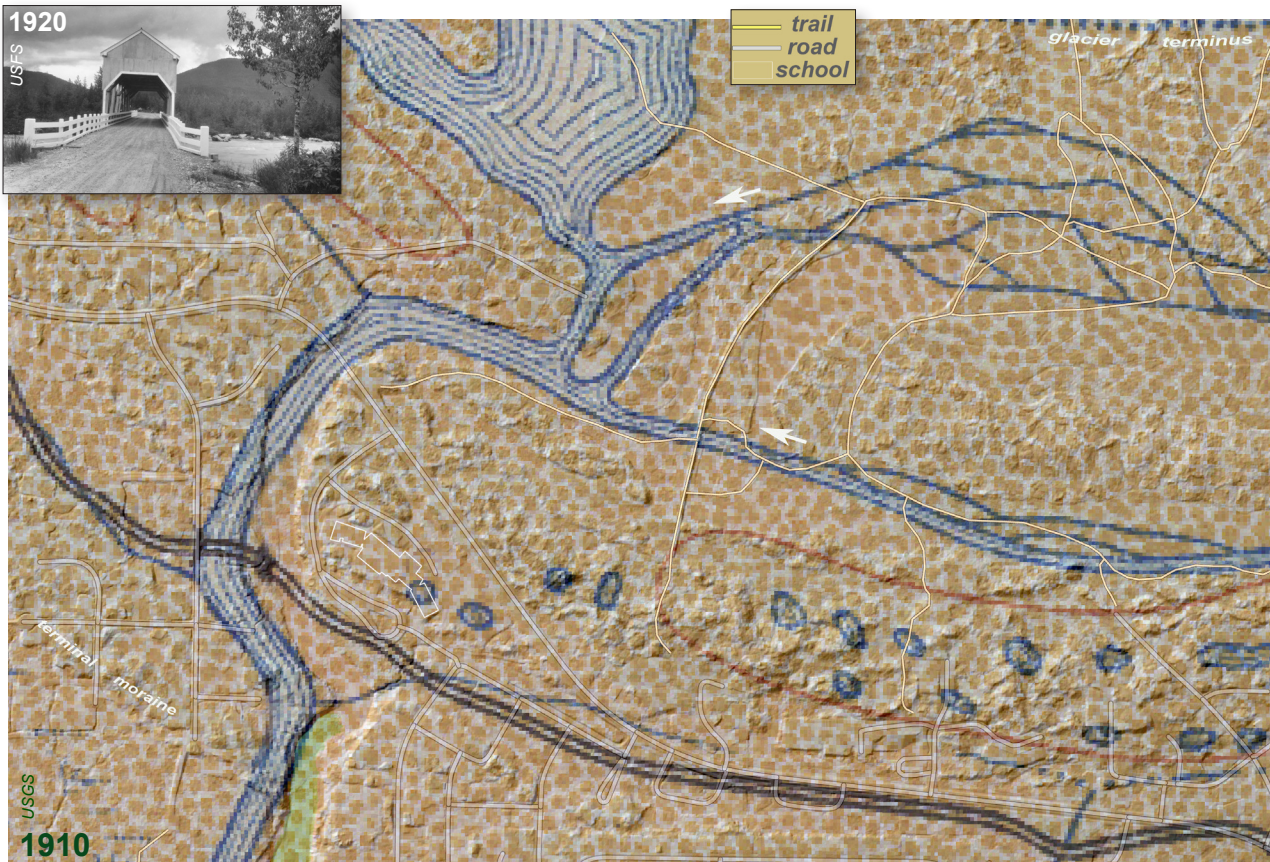
Before first airphoto missions over SE Alaska, our series relies on maps. Fortunately, in much of CBJ, we have this fine-scale map by USGS. Topography, roads and stream-lines courtesy WJ Peters in 1902, with geo-unit overlays ~8 years later by Adolf Knopf. Exported at 66% transparency so topography from LiDAR is seen beneath.

On this map & most following photos, I've overlaid trails, roads and school outline. Few were actually present until the 1970s when development accelerated in the upper Valley.

1910

'Back loop road' didn't yet loop in 1910, leading instead to mines up Kaxdigoowu Héen, going back clearwater (Montana Creek). A covered bridge (inset) spanned The River very close to the school, ~1,000 feet downstream from today's location.

Dotted line in upper right is edge of The Glacier, receded ~4,000 feet from terminal moraine. White arrows mark residual and active outwash channels, since 'unplugged.'



US Navy flew the first South-east cartographic missions in 1926 & 29—now offering nearly a century's retrospective on fluvial migration, succession, and expansion of built-environments.

1929

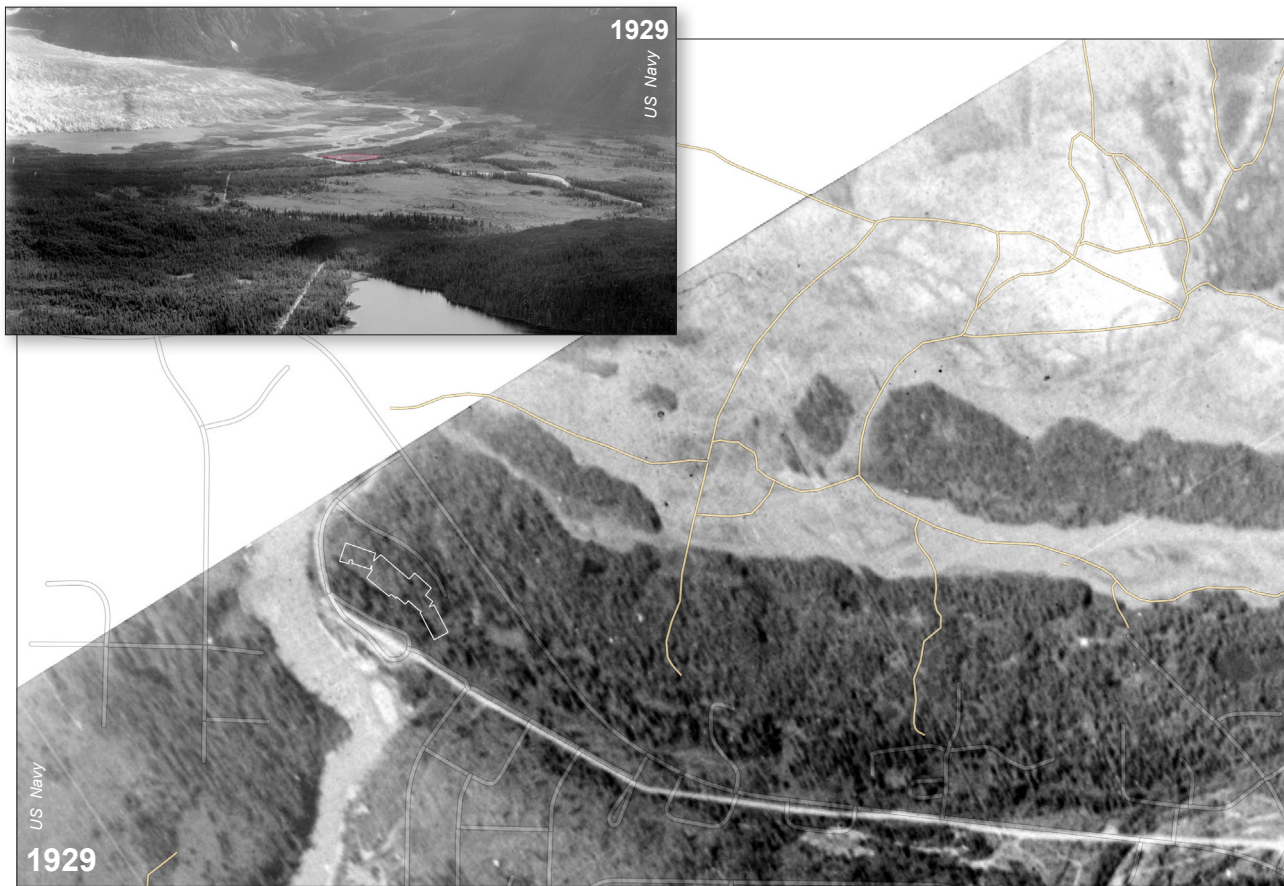
Good news; their flightline of 1929 *just barely* included the future site of Mword River School.

Bad news; until 1948 (next page) we have no nadir photography north-west from this line. Only obliques (inset) show the school grounds in '29.

School-area moraines had only scrubby spruce woodland. Only a few of the 15 kettle ponds mapped in 1910 remained, bottoms not reaching the water table.

Outwash channels on previous map still carried flow from eastern portions of the icefront, as shown on the oblique.

Covered bridge had apparently washed out, replaced upriver as shown on next aerial from 1948.



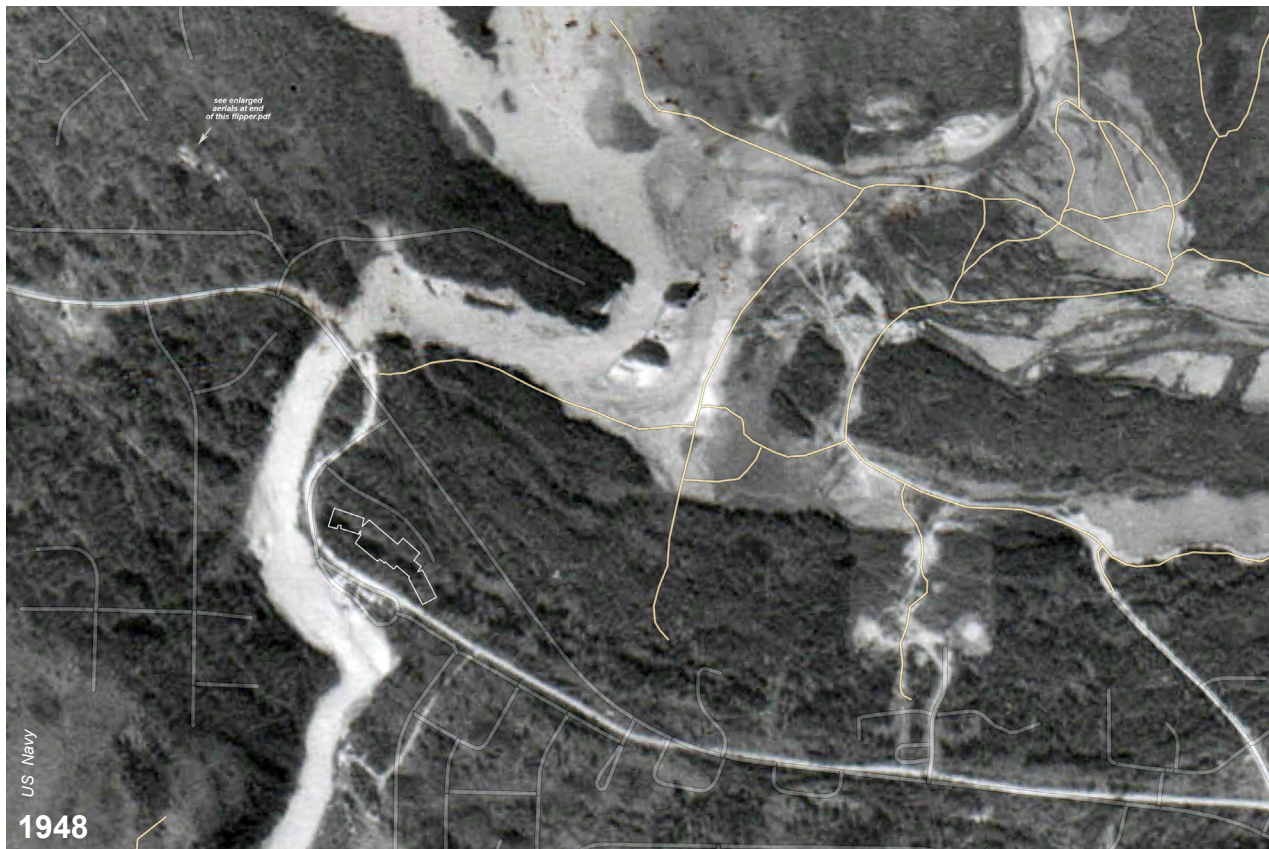
The Navy returned to Southeast Alaska for a second post-war mission in 1948. Many of today's USGS topographic maps are still based on this 1948 imagery. Planes flew quite high, so it's the lowest resolution of my series.

1948

As on preceding 1929s, forest upvalley from back-loop road was darker and maybe coarser-textured than the forest extending down to terminal moraine. Not sure why.

Pace of glacial recession was accelerating, and The Lake now covered a square mile (half its current size). Unplugged gravelly outwash channels on the east were now being mined for road-fill, creating Dredge and Crystal lakes, shown more crisply on following 1962 aerials.

Back Loop Road still swung south to river's edge, downvalley from future schoolsite. Once disconnected, it would become the school driveway. Homestead, upper left, is discussed at end of this page-flipper.



In the late 1950s & early 60s, USFS shot "resource photography," flying lower than prior Naval cartographic missions. Goal was timber assessment, but they also flew communities including CBJ.

1962

In the 1960s, a major fish "enhancement" project took place throughout what became the lower Recreation Area.¹ It involved creation of artificial, interconnected lakes and ponds.

First and largest was Moose Lake (named for . . .?), caught here half dredged. Today, such heavy handed earthmovings are prohibited. A history of this project should be written, as much about the lower rec-area is otherwise incomprehensible.

¹ My mentor the hydrologist Dan Bishop, and fish biologist Mike Bethers were involved. Dan considered it a misguided boondoggle, thus my scarequotes around *enhancement*. One legacy that remains in use is the oval-shaped pond used for coho seining.



USFS high-res "resource photography" wasn't rectified until late 1990s. Foresters worked mostly from overlapping 9x9" prints, [assessing stands in stereo](#). For 3D versions of these aerials, see our pdf reports from [JuneauNature>SCHOOLS>Natureneartheschools](#).

1984

Toggling between this photo and preceding 1962s is kind of shocking. When I arrived in 1977, anyone who could swing a hammer could get hired to help spread suburbia over the landscape. My wafflehead prints are on a lot of the studs & joists in this picture.

xxxxx

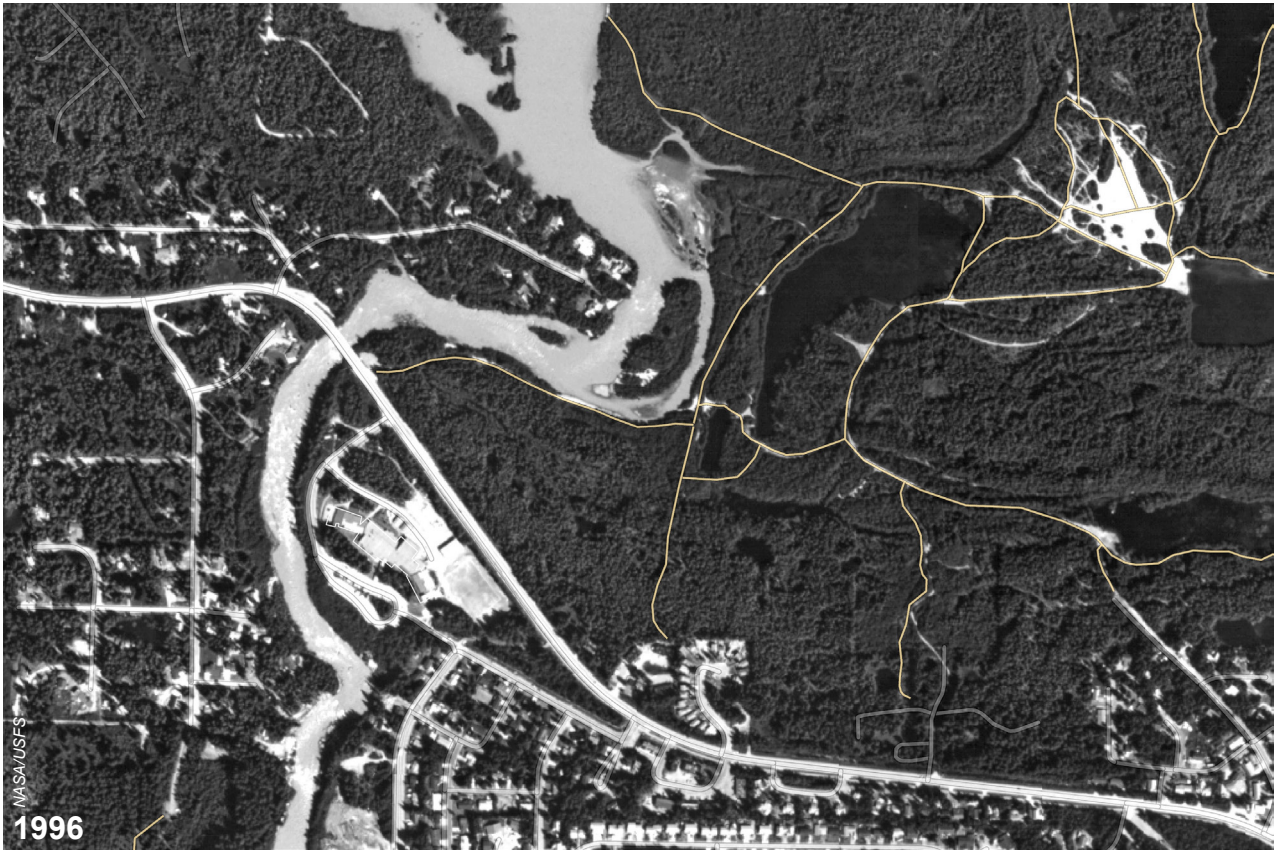


NASA flew super-high cartographic imagery, scanned, georeferenced and tiled by USFS.¹

1996

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XXXXXXXX

¹ This mission was similar to NASA's prior inch-to-mile 1979 color infrareds (CIRs). From U2s at 80,000 feet, some detail is forfeited, but tree-lean and mountain-slope warping associated with lower-elevation missions is minimized. At 6-foot pixel, it's coarser than subsequent imagery. USFS also converted from CIR to B&W. But this was the first SE AK-wide ortho-coverage, launching many of us into the world of digital cartography.



CBJ commissioned 4-foot-pixel true-color imagery for much of its developed lands. (2-fters also available, but my collection's incomplete).

2006

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In 2013, preparing for our [2014 wetland assessments](#), the City commissioned LiDAR-&-orthophotography from Watershed Sciences Inc. At 6-inch-pixel, this remains our sharpest-res borough-wide imagery, exceedable only by drone-based orthos for relatively tiny areas.

Color infrared is superior to true color (eg, next page) for distinguishing conifer from deciduous stands.

2013

XXXX

XXXXXXX



[ArcGIS Online](#) (AOL) is now my go-to source for current online aerial imagery. You can set up a free personal account that allows toggling between a wide range of basemaps and orthoimagery.¹

2020

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¹ AOL historical archives, called [Wayback](#), allow search through earlier coverages. Populated areas like CBJ see ortho updates ~every 3 years.

Reeder homestead

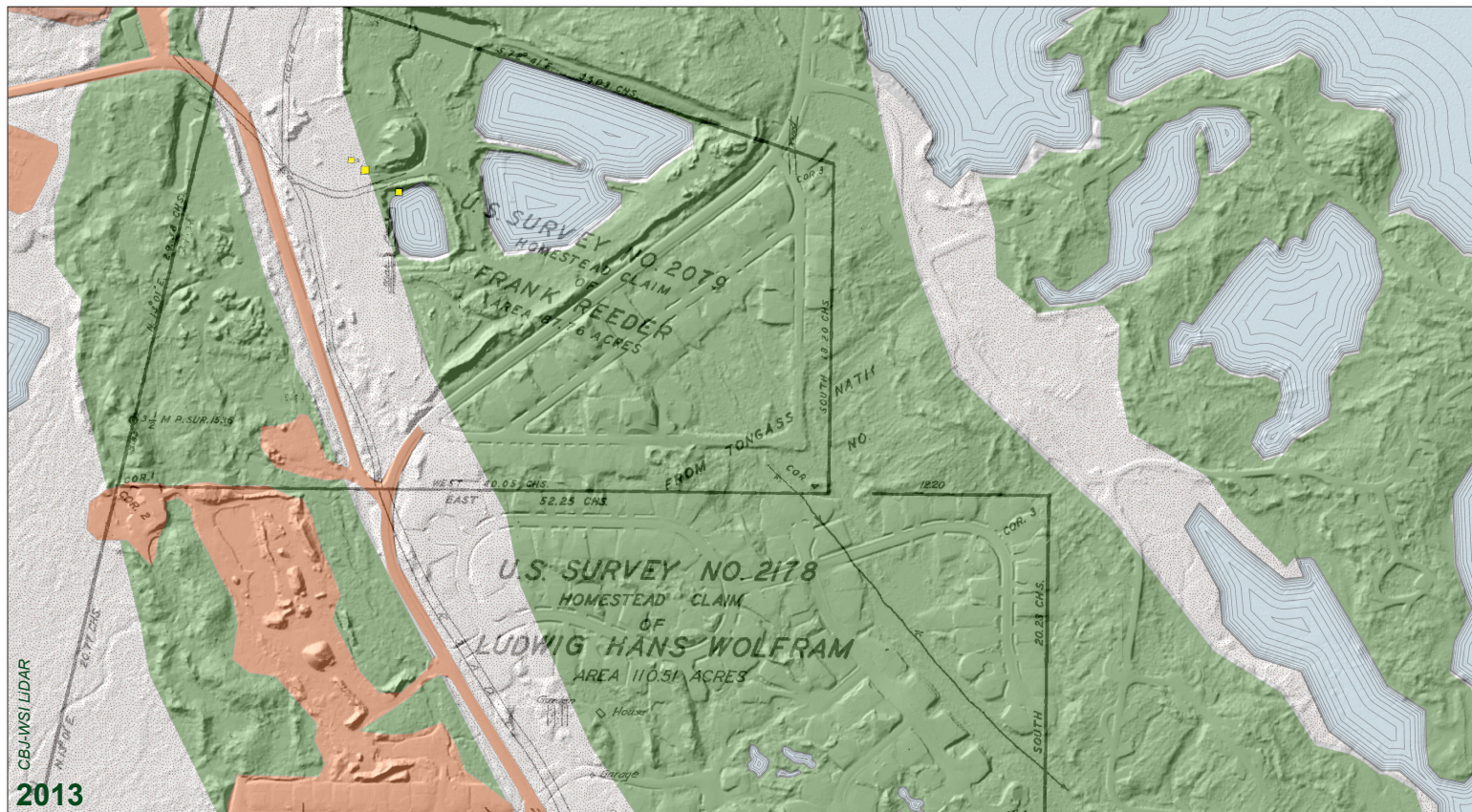
For a decade or so I've wondered about the location of this homestead. The 6-digit hand-numbered B&Ws are from a long-running Forest Service collection.¹ It's part of a collection scanned by Mike Blackwell at the National Archives in Anchorage (NARA). No date, but all other numbers in the roughly sequential 2538xx range that do have dates are from 1930. Caption says this was a "homesteader." Resolution is almost good enough to identify the woman in the doorway.

Sharks-fin in background would make a reliable triangulation on-site. But you'd have to climb a tree or put up a drone to see it today. I wondered if it was that isolated cabin marked on the 1948 aerials, but an ArcPro tipdown view didn't match. Swinging northwestward I found it (inset), then searched early historicals and US Survey maps for early homestead buildings. It's the Frank Reeder plat, USS 2079. Today the entire surface has been stripped and dredged by West Glacier Development LLC—rather surprising on a surface of glacial moraine. Strange odors emanate from these ponds as you walk the highway near Skaters Cabin.

What killed the spruces? Largest on right was girdled, but not the others. Mink skins hang alongside the road. Pens are mapped, next page.

¹ Dan Bishop told that from ~1910 to ~1960, most foresters carried medium-format cameras shooting at higher resolution than subsequent 35mm slides everyone switched to..



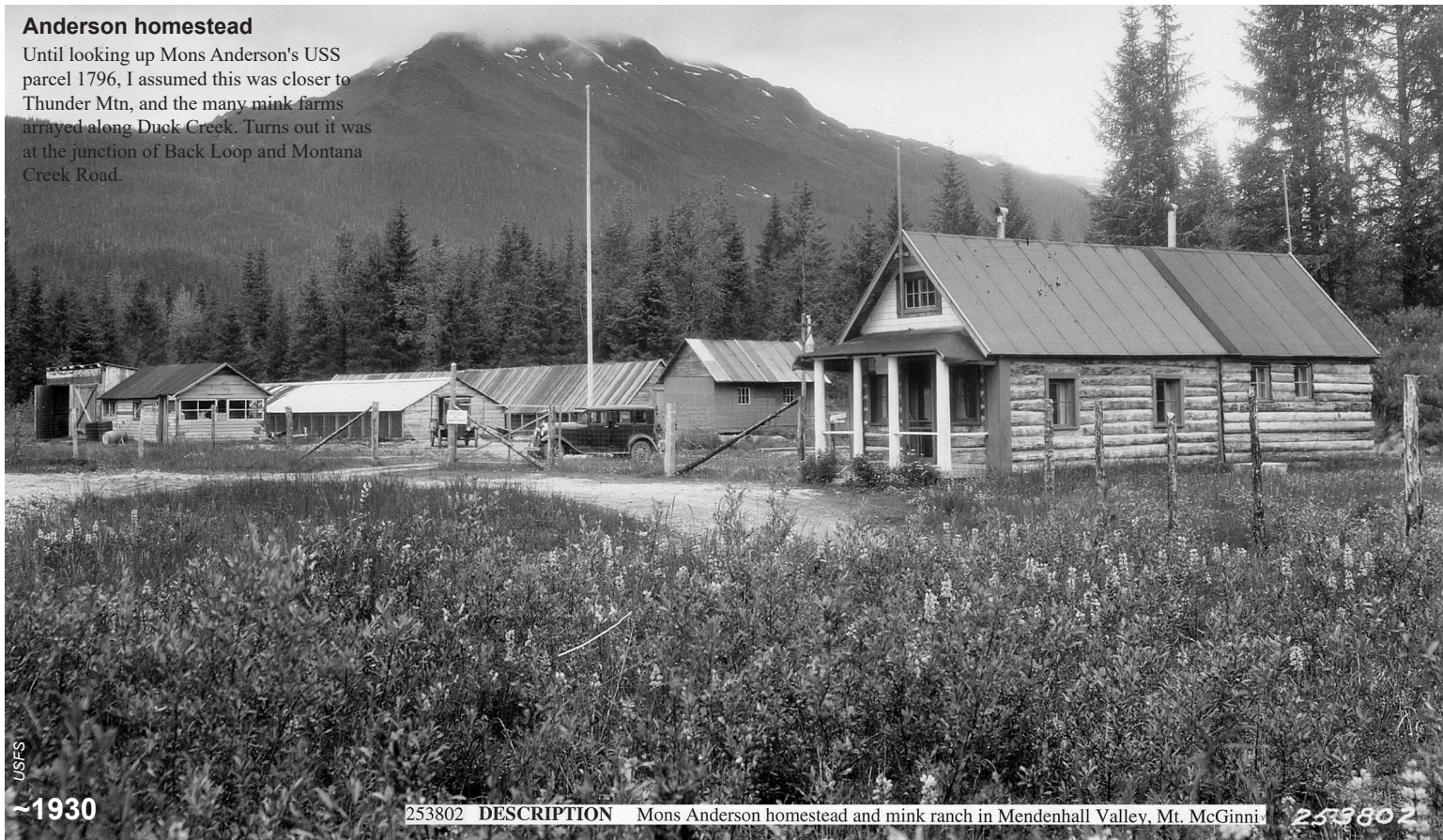






Anderson homestead

Until looking up Mons Anderson's USS parcel 1796, I assumed this was closer to Thunder Mtn, and the many mink farms arrayed along Duck Creek. Turns out it was at the junction of Back Loop and Montana Creek Road.

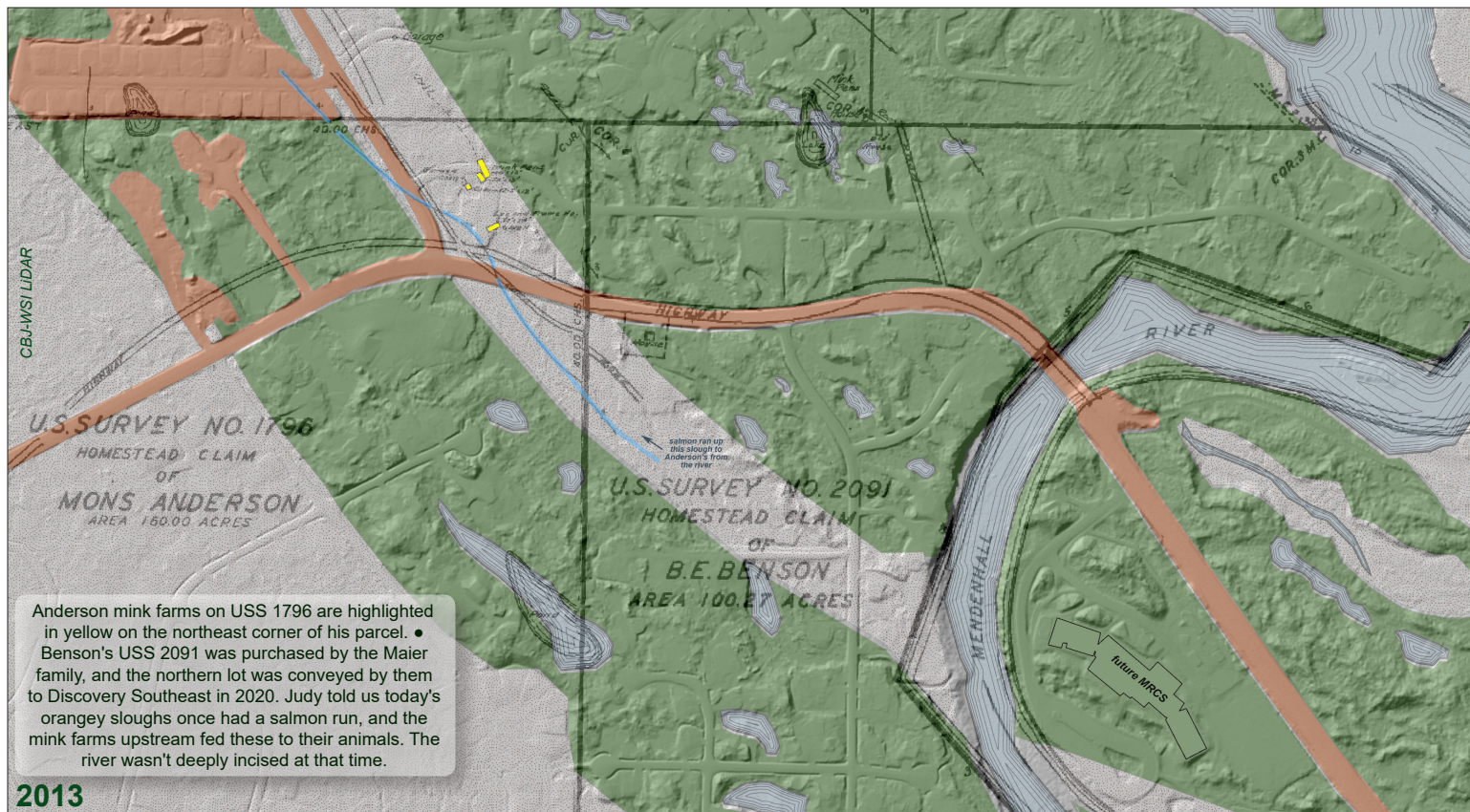


USFS

~1930

253802 DESCRIPTION Mons Anderson homestead and mink ranch in Mendenhall Valley, Mt. McGinnis

253802





By 1962 only some small structures remained on the old Anderson parcel. Today's parcels are superimposed, but back loop hadn't yet been this finely subdivided in the 1960s.

The Maier lot originally included a log cabin on the NW corner, shown on previous USS overlay. It was given to a minister. Today, it's divided into 4 small lots.

1962

